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Philip, J. [GB/US]; Arriva Pharmaceuticals Inc., 2020 Challenger Drive, Alarmeda, CA 94501 (US).

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(74) Agent: GILL JENNINGS & EVERY; Broadgate House, 7 Eldon Street, London EC2M 7LH (GB).

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(71) Applicant (for all designated States except US): ARRIVA-PROMETIC INC. [CA/CA]; 6100 Royalmount Avenue, Montreal, Quebec, H4P 2R2 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BATHURST, Ian, C. [US/US]; Arriva Pharmaceuticals Inc., 2020 Challenger Drive, Alameda, CA 94501 (US). PEMBERTON, Philip, A. [NZ/US]; Arriva Pharmaceuticals Inc., 2020 Challenger Drive, Alameda, CA 94501 (US). SUNDIN, David, J. [US/US]; Arriva Pharmaceuticals Inc., 2020 Challenger Drive, Alameda, CA 94501 (US). MAYHEW, James, W. [US/US]; Dow Pharmaceutical Science, 1330A Redwood Way, Petaluma, CA 94954-1169 (US). ANGEL, Arturo, J. [US/US]; Dow Pharmaceutical Sciences, 1330A Redwood Way, Petaluma, CA 94954-1169 (US). BARR,

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(57) Abstract: Compositions containing a protease inhibitor and methods of use and production are described. The compositions contain an effective amount of a protease inhibitor in a carrier or diluent and are used for the treatment of inflammatory or hyperproliferic mucocutaneous disorders. The carrier or diluent is preferably a gelling agent, and the composition is a topical gel formulation containing alpha 1-antitrypsin in an aqueous liquid or viscous gel formulation.